

**Remarks/Arguments**

The Office Action dated May 21, 2004, has been noted and its contents carefully studied. In light of the forgoing amendments, reconsideration of the rejection under 35 USC §102 and/or 103 is courteously requested.

Initially, it is noted that certain amendments have been made to the specification. These amendments are merely of a grammatical nature and/or to correct obvious errors, including adding an appropriate description of elements 55 and 57 of Figure 3 in a manner which is self-evident from the drawings and from the originally filed description of the invention.

With respect to the claims, claims 1, 12 and 17, they have been amended to clarify that the detection in accordance with the invention is done with a computer connected to the network that has an operating system programmed for detecting exception conditions. Claims 2 – 4 have been canceled and new claims 18 – 23 have been added. Claims 18 – 20 are system claims and depend from independent claim 17. Claim 21 is a new method claim incorporating the limitations of claims 1 – 4 in independent form. Claim 22 is similar to claim 5 but depends from claim 21 and claim 23, is similar to claim 10 but depends from claim 23.

It is respectfully urged that the invention as now recited in the amended claims and newly added claims is not taught or suggested under 35 USC §102 and/or 103 by the cited Huang reference. More specifically, in one aspect, the invention as now recited in the claims calls for a method of selectively recovering nodes on a computer network, having a plurality of paths connected to adapters on at least one host computer for managing input/output requests between the host computer and fibre channel devices having a plurality of logically units associated therewith. Exceptions are detected in a network, with the detection being done with a computer connected to the network which has an operating system thereon programmed for detecting the exception conditions. A recovery of only the adapters, FIDs and LUNs within the scope of the exception condition is conducted and simultaneously, I/O requests are continued to be issued to adapters, FIDs and LUNs during recovery for those adapters, FIDs and LUNs that are not within the scope of the exception condition. In an alternative aspect, a similar method of recovering nodes is provided by claim 12 as now amended.

Independent claim 18, which is newly added, provides more specifically how recovery is done. In accordance with claim 18, if an adapter needs to be recovered, it is recovered before

recovering FIDs or LUNs associated with the adapter. If an FID needs to be recovered, the FID is recovered before recovering LUNs associated with the FID. LUNs are recovered only if an FID and adapter associated with the LUNs are not in need of recovery.

Accordingly, in order to further facilitate the Examiner's reconsideration a discussion of the cited reference is presented herein, and more particularly points out why the claimed invention is not anticipated by or obvious from the cited reference under 35 USC §102 and/or 103.

U.S. Patent Application Publication No. US 2001/0052084 A1 to Huang et al.

U.S. Patent Application Publication No. US 2001/0052084 A1 to Huang et al. (hereinafter "Huang") merely discloses a fault tolerant network which provides a network fault tolerance manager for detecting failures and manipulating a node to communicate with an active channel. Failure recovery includes switching all node data communications to a standby channel or switching just those nodes detecting a failure. As such, it is important to appreciate that Huang's method of recovery is merely to switch to a standby channel for all node data or merely those nodes detecting a failure. There is nothing in Huang which provides that detection is done with a computer connected to the network having an operating system program for conducting detection, and specifically recovering adapters from FIDs and LUNs within the scope of the exception condition while issuing I/O to adapters, FIDs and LUNs during recovery that are not within the scope. In fact, Huang merely teaches a middleware approach which provides network fault tolerance over conventional Ethernet networks (10). The middleware comprises computer software residing above a network interface device and the device driver, yet below the system transport services and/or user applications (11).

Contrary to the Examiner's assertions regarding claims 1, 12 and 17, while Huang does teach detection by certain nodes, which the Examiner asserts inherently include an operating system, it fails to teach conducting the recovery with an operating system in the manner recited in Applicants' claims.

Moreover, there is no discussion of fibre channel devices or logical units. The network disclosed by Huang is not a hierarchical network, and instead is a peer-to-peer network which provides a communication channel for the transmission of data or traffic from one computer to

another. There is nothing taught or suggested by Huang which addresses recovery in a predetermined manner for specific devices in a fibre channel network by a computer hosting an application for effecting the recovery in a hierarchical arrangement, for example, as more generally illustrated in Figures 1 and 2 of the specification. Applicants' system and method bears no resemblance to the peer-to-peer interconnections through switches of independent nodes which are computers as shown in Figure 1B of Huang. All Figure 2 of Huang shows is how one specific node is designated as a manager node to select alternative channels to permit communications to continue between the remaining nodes in the peer-to-peer network.

As to claim 2, as now combined with claims 3 and 4 in the form of new claim 21, there is nothing in Huang which teaches the specific steps of recovery of adapters, FIDs and LUNs. Moreover, while the Examiner asserts that Huang teaches recovering an adapter, this is an inaccurate characterization because in the Examiner's own words, it is admitted that a channel is recovered by swapping to an adapter (NIC) connected to a standby channel. As such, this is an improper characterization in hindsight of the teachings of the cited reference to attempt to arrive at applicant's claimed invention, because there is no recovery; only a switchover.

As to claim 5, there is nothing in Huang that discusses recovery of FIDs and LUNs associated with an adapter. The same comments apply to claim 6 which depends from claim 5. As to claims 7, 8 and 9 there are no fibre channel devices and an associated logical unit connected to an unrecoverable adapter in Huang. Huang is an Ethernet system facilitating communications between individual computers, and there are no FIDs or LUNs described or discussed in Huang.

As to claim 10, Huang merely discloses conventional switches in an Ethernet computer network and has nothing to do with fibre channel switches, devices or logical units.

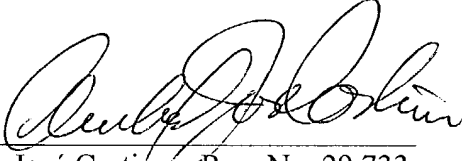
Applicants' comments as to claims 13 – 16, apply in the same manner as directed to the afore-discussed claims 2, 5 – 10.

Thus, for the foregoing reasons, it is respectfully urged that all of the claims clearly define patentable subject matter under 35 USC §102 and/or 103. Nonetheless, should the Examiner still have any comments, questions or suggestions of a nature necessary to expedite prosecution of the application, or to place the case in condition for allowance, he is courteously requested to telephone the undersigned at the number listed below.

Application No. 09/882,707  
Amendment dated August 19, 2004  
Reply to Office Action dated May 21, 2004  
Express Mail EV406623375US

Dated: August 19, 2004

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "A. José Cortina", written over a horizontal line.

A. José Cortina, Reg. No. 29,733  
Daniels Daniels & Verdonik, P.A.  
P.O. Drawer 12218  
Research Triangle Park, NC 27709  
Voice 919.544.5444  
Fax 919.544.5920  
Email [jcortina@d2vlaw.com](mailto:jcortina@d2vlaw.com)

Enclosures

F:\CLA\1301-012\Prosecution\Amendment.doc